



U.S. Department of Justice

*United States Attorney
Southern District of New York*

*The Silvio J. Mollo Building
One Saint Andrew's Plaza
New York, New York 10007*

September 3, 2021

BY ECF AND EMAIL

The Honorable Richard M. Berman
United States District Judge
Southern District of New York
500 Pearl Street
New York, NY 10007

Re: **United States v. Robert Hadden,**
S1 20 Cr. 468 (RMB)

Dear Judge Berman:

The Government respectfully submits this letter to update the Court on the progress of its responsiveness review of the 33 electronic devices seized pursuant to two search warrants, and to inform the Court of the steps we intend to take moving forward, absent further direction from the Court.

As set forth in more detail below, by the end of the day the Government will have identified for the defense the materials it has determined to date are responsive to the search warrants, and has made significant progress on partially reconstructing the large volume of deleted data on the devices. For the reasons described below, the Government intends to continue its responsiveness review of the devices and produce any newly identified responsive materials to the defense promptly and on a rolling basis, [REDACTED], and update the Court and the defense in one month as to the status of its responsiveness review.

The Government respectfully submits that no action is necessary from the Court at this stage, particularly given that it is possible that the Government's ongoing responsiveness review may yield no additional responsive materials, or a limited set of such materials. Any defense challenges to the Government's use of any forthcoming responsive materials can be appropriately addressed, if at all, in the context of a suppression motion. The Government does not believe that any of the above steps will delay the trial date in this case.¹

¹ Prior to filing this letter, the Government advised the defense of the above.

I. Background

A. *The Search Warrants and the Court's July 2021 Ruling*

As set forth in detail in the Government's letter of July 7, 2021, the Government executed the search warrants in or about August and September 2020, resulting in the seizure of the approximately 33 electronic devices (the "Devices"), which contain in excess of 3 million data artifacts. (Dkt. 95 at 2-4 (the "July 7 Letter")). On April 5, 2021, the Government produced to the defendant forensic images of 26 of the Devices and informed the defense that they could inspect any of the Devices, including the Devices that could not be imaged and the Apple iBook, which contained child pornography. (*Id.* at 5).² The Government has repeatedly informed the defense that they are free to inspect and review any of the Devices in person.³

On July 6, 2021, the defense filed a preemptive motion to suppress evidence obtained from the Devices. (Dkt. 93). In its response, the Government stated that it believed it would be able to identify for the defense materials responsive to the search warrant by early September 2021 (Dkt. 95 at 7), and agreed that it would do so on a rolling basis by or before September 3, 2021 (Dkt. 98-1 at 15-16). At a court conference on July 12, 2021, the Court denied the defendant's motion, concluding that:

[T]he length of time taken to review the materials by the government has been reasonable in light of, among other things, the number of electronic devices involved, volume of material, the nature of the review, technologically and subjectively including a privilege screening, and the limitations imposed by the COVID-19 pandemic.

(July 12, 2021, Tr. at 5). The Court further directed the Government to "identify for the defense responsive materials that it reasonably identifies on a rolling basis and that it do so no later than September 3, 2021." (*Id.*)⁴

Both before and after the July 12, 2021 conference, the Government has worked diligently to review the Devices for materials responsive to the search warrants. As the Court is aware, the Government has used a privilege team to segregate and conduct an initial privilege screen and privilege review, which is ongoing, of approximately 26,000 of the over 3 million data artifacts. (Dkt. 95 at 6-7). As a result, the substantive portion of the responsiveness review did not begin until in or about March 2021, approximately six months ago. (*Id.* at 5). In addition, in conducting its analysis, the FBI identified indicia of encryption and of virtual drives and virtual computers—

² The FBI was unable to create forensic images of the remaining six devices.

³ Subsequent to the July 7 Letter, the defense inspected certain of the Devices in person twice, and requested and received copies of selected data from the Apple iBook.

⁴ The Government understands the Court's ruling to have been predicated on the Government's representation that it would be able to complete its responsiveness review by September 3. (*See id.* at 4-5). Since—as set forth below—the Government has not been able to do so despite the exercise of due diligence, the Government respectfully intends, absent contrary direction from the Court, to continue its review.

sophisticated data storage techniques that can allow the storage of data so that it is not immediately apparent or visible to other users of the computer. (*Id.* at 7).

B. *The Deleted Data and the Government's Ongoing Responsiveness Review*

Throughout the course of its responsiveness review, the Government has learned that, in addition to the more than 3 million artifacts on the Devices, certain of the Devices contain a large volume of deleted data (the “Deleted Data”). The Deleted Data is not immediately readable: much of it is in hexadecimal code or “hex,” a numeral system that is difficult for humans to read,⁵ and much of it is not accompanied by metadata (*i.e.*, data offering information about a specific file such as the date and time of its creation). As of July 7, the Government understood that the Devices contained Deleted Data, but we have since learned more about the volume, nature, and mechanics of analyzing the Deleted Data.

The FBI has been working diligently to forensically reconstruct the Deleted Data's raw data fragments in a process called “data carving.” Data carving is an extremely time-intensive process, and it has been made even more time-intensive because of the volume of the Deleted Data. This process—which can be roughly analogized to reconstructing shredded paper documents by attempting to compare and connect the individual strands—requires, on the technical side, long-running automated software processes (often requiring software to perform single processing tasks for days at a time) and, on the human side, considerable sustained attention by a technically skilled individual in order to review and analyze the data and to configure and run further automated processes. A portion of this work can be performed in parallel, but a number of tasks have to be performed in sequence, as the data resulting from certain processes is then used to inform the performance of certain additional steps. Importantly, the amount of time it takes to reconstruct deleted files through data carving is inherently unpredictable, since it depends greatly on the specific characteristics of the typically disorganized set of deleted data. In this case, the process has proved more time-consuming than anticipated not due to any lack of diligence but due principally to technical factors rendering the Deleted Data less readily tractable to reconstruction than some other data sets.

The FBI has devoted significant technical resources to the expeditious processing of the responsiveness review. The technical processing of the review has consumed an unusually large proportion—at times the majority—of the network bandwidth of the entire computer forensic laboratory used by the FBI New York Field Office's child exploitation section. In order to avoid bottlenecks to the maximum feasible extent, the FBI has made multiple copies of the imaged data in order to be able to run multiple processes on several separate computers simultaneously, an unusual step reflecting the priority being placed on this review. The FBI has also purchased and used several pieces of specialized software—*i.e.*, more specialized than the already specialized forensic data analysis software typically used by the technically advanced squad conducting this investigation—costing thousands of dollars and requiring substantial training and familiarization. The FBI case agent has prioritized this responsiveness review above all other matters, devoting the overwhelming majority of his time to this review. The bulk of this time has involved the technical process of reconstructing deleted data.

⁵ The hexadecimal system uses a base of 16, unlike the familiar base 10 numeral system, and hexadecimal numerals are rendered with a combination of numbers and letters.

Substantial progress has been made with respect to this review. To date, the FBI has been able to partially reconstruct approximately 1.6 terabytes of the Deleted Data, which the Government has made available to the defense in its entirety for their inspection to facilitate their trial preparation and the majority of which it is in the process of copying for the defense.⁶ While the Government's responsiveness review of this deleted but partially reconstructed data is not complete, the FBI has so far found a substantially higher volume of material with sexual subject matter among the Deleted Data than among the non-Deleted Data, suggesting that continued analysis may yield information that could be highly probative of the defendant's state of mind, among other things.⁷

C. *The Government's Production of Responsive Material To Date*

Notwithstanding the ongoing review of the Devices and Deleted Data, the Government has complied with the Court's July 12 order by identifying for the defense the responsive materials that it has reasonably identified on a rolling basis. To date, these materials have constituted a total of approximately 224 files with a total size of approximately 116 megabytes.⁸ In addition, as noted above, the Government is in the process of producing to the defense the 1.6 terabytes of the Deleted Data that it has been able to reconstruct to date.

II. Discussion

In light of the significant volume of Deleted Data and the complex and time-intensive processes and tools that have been required to reconstruct or "carve" the Deleted Data, the Government respectfully intends, absent further direction from the Court, to continue its responsiveness review of the Devices and identify any additional responsive materials to the defense promptly and on a rolling basis.

⁶ A portion of this 1.6 terabytes of partially reconstructed Deleted Data may overlap with the 3 million data artifacts discussed in the July 7 Letter.

⁷ The Government is not at this time in a position to definitively attribute all of the material to the defendant or to draw conclusions with respect to the circumstances of the deletion of this data, and does not intend to suggest that the data or its deletion, to the Government's knowledge to date, establishes an intent on the part of anyone to obstruct the Government's investigation. The Government recounts these facts instead to indicate that the progress of the review gives further reason to believe that continued review and analysis will yield additional material responsive to the warrant.

⁸ The Government is in the process of identifying for the defense additional such materials, and by the end of the day, the Government will have identified for the defense all of the materials that it has determined to date are responsive to the warrants.

At this stage, the Government is not in a position to predict what precisely may be recovered from the Deleted Data and how, if at all, the Government may seek to use such evidence at trial in its case-in-chief or otherwise. The Government, however, believes that it is critically important to continue its analysis of the Devices pursuant to the search warrants for purposes of fact-finding and given that the evidence could be relevant at trial or at any potential sentencing of the defendant.⁹ Should the Government's review yield additional responsive materials, the Government will identify those materials to the defense promptly and on a rolling basis. With the Court's permission, the Government will update the Court and the defense as to the status of its review by October 1, 2021.

The continuation of the Government's review past September 3, 2021, should not affect the trial date. To the extent the Government identifies additional materials as responsive after September 3, it is likely that the same arguments would apply to these materials as to the materials it has already identified to the defense as responsive.¹⁰ To the extent that new materials are designated as responsive after September 3 and they require additional briefing that cannot be accommodated by the current briefing schedule, the Government believes that the parties can confer on and agree to a reasonable accommodation, such as through adjusting the suppression briefing schedule or allowing targeted supplemental letter-briefing. It is certainly premature to conclude now that the continuation of some review past September 3 (*i.e.*, past a date four months before the commencement of trial) will interfere with the trial schedule, *cf. United States v. Sosa*, 379 F. Supp. 3d 217, 222 (S.D.N.Y. 2019) (approving of responsiveness review completed less than three months before trial), and the Government respectfully suggests that the Court can defer reaching such a conclusion until substantially nearer to trial, should the responsiveness review even continue to such a point.

Although the Court need not rule on the reasonableness of the Government's review unless and until it becomes relevant for a motion to suppress evidence, the Government respectfully submits, consistent with the Court's July 12 ruling, that its ongoing responsiveness review is entirely reasonable under the Fourth Amendment given, among other things, the volume of data, including the Deleted Data, the time-intensive and complex nature of this particular forensic review, and the diligence exercised by the Government. In these circumstances, it is reasonable to continue the review in order to afford the Government a fair opportunity to obtain from the Devices the material specified in the search warrants.¹¹

⁹ Although the impetus for the continuation of the responsiveness review is the time it has taken to reconstruct the Deleted Data, the continuation of the search will necessarily involve continued review of the non-Deleted Data. For example, reconstructing deleted files may render the identity of a computer's user at certain moments highly significant, placing new importance on other data that might otherwise have seemed innocuous. *See, e.g., United States v. Aboshady*, 951 F.3d 1, 7 (1st Cir. 2020) (not unreasonable for Government to "run searches on that data [from Google] for years afterwards 'as it developed new theories' of [the defendant's] possible criminal liability").

¹⁰ The Government notes that the approximately 224 documents it has identified as responsive so far are of a very limited and manageable volume.

¹¹ *See, e.g., Sosa*, 379 F. Supp. 3d at 222 (search of two phones, which took 10 and 15 months to complete, was reasonable, where the "searches were executed pursuant to valid warrants, commenced shortly after execution, and completed nearly three months prior to defendant's scheduled trial); *United States v. Estime*, No. 19 Cr. 711 (NSR), 2020 WL 6075554, at *14

III. Conclusion

Accordingly, the Government intends, absent further direction from the Court, to continue its responsiveness review and to continue to identify for the defense responsive materials on a rolling basis after September 3, without prejudice to the parties' right to litigate the admissibility of any responsive materials identified thereafter. The Government will provide an update to the Court and to the defense as to the status of this review by October 1, 2021.

Respectfully submitted,

AUDREY STRAUSS
United States Attorney

by: /s/ Paul M. Monteleoni
Jane Kim
Lara Pomerantz
Paul M. Monteleoni
Alexandra N. Rothman
Assistant United States Attorneys
(212) 637-2038 / 2343 / 2219 / 2580

cc: Defense Counsel (By Email and ECF)

(S.D.N.Y. Oct. 14, 2020) (agreeing with Government that retaining cellphone for “10-months, or more” before completing a search was reasonable, where delay was “result of difficulties created by encryption”); *United States v. Nejad (Sadr)*, 436 F. Supp. 3d 707, 733 (S.D.N.Y. 2020) (responsiveness review reasonable, where it concluded “roughly three years after issuance of the first search warrant in April 2014 and only one year after issuance of the last warrant in 2016,” and where the returns “comprised over one million documents in at least three different languages”); *United States v. Mendlowitz*, No. 17 Cr. 248 (VSB), 2019 WL 1017533, at *4, *11 (S.D.N.Y. Mar. 2, 2019) (upholding review process that started in October 2015, two months after execution of the warrant, and ended April 2017, right before return of the Indictment); *United States v. Pinto-Thomaz*, 352 F. Supp. 3d 287, 309 (S.D.N.Y. 2018) (holding that the “Government has not exceeded any constitutional or Rule 41 deadline for concluding the search of the iPhone given the difficulties posed by encryption” where the “Government has only possessed the iPhone in question for a matter of months . . . at this point, hardly a constitutionally significant period of time given the encryption difficulties,” and where the “Government further represents that it continues to need the iPhone for its preparation for trial and continues to seek to de-encrypt the iPhone as it accesses new technology”).